

Biotinylated Human c-Kit(CD117) Protein; His-Avi Tag

Product Information

Product Name Biotinylated Human c-Kit(CD117) Protein; His-Avi Tag

Storage temp. Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt.
Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Catalog# / Size **GM-87118RP-25 / 25 μg**
GM-87118RP-200 / 200 μg

Protein Information

Alternative Names CD117,SCFR,c-kit,KIT

Source Biotinylated Human c-Kit(CD117) Protein; His-Avi Tag (GM-87118RP) is expressed from human 293 cells (HEK-293). It contains AA Gln 26 - Thr 516 (Accession # P10721-2).

This protein carries a His-Avi tag at the C-terminus.

Purity > 95% as determined by SDS-PAGE

Endotoxin < 1 EU/ μg , determined by LAL gel clotting assay

Predicted Mol Mass 56.5 KDa

Formulation Supplied as a 0.2 μm filtered solution of PBS, pH7.4.

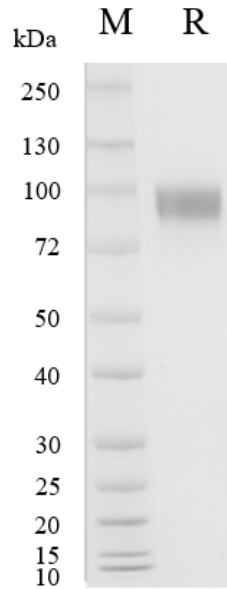
Description The c-kit protein, also known as CD117, is a transmembrane receptor tyrosine kinase and an important cell surface receptor protein. It is encoded by the c-kit gene and is a type of stem cell factor receptor. The c-kit protein is widely expressed in various cell types, including hematopoietic stem cells, neurons, macrophages, and germ cells.

The c-kit protein plays an important role in cellular biological processes, primarily by binding with its ligand stem cell factor (SCF) to regulate cell proliferation, differentiation, migration, and survival. When SCF binds to the c-kit protein, it activates the tyrosine kinase activity of the c-kit protein, thereby activating multiple signaling pathways such as MAPK, PI3K/AKT, and JAK/STAT, influencing cell functions.

In tumors, the c-kit protein also plays a significant role. Many tumor cells express the c-kit protein, particularly in gastrointestinal stromal tumors (GIST) and chronic myeloid leukemia (CML). Targeted therapy drugs against the c-kit protein, such as Imatinib, have been widely used to treat c-kit-positive tumors.

Version:3.3 Revision Date:25/12/2023

SDS-PAGE

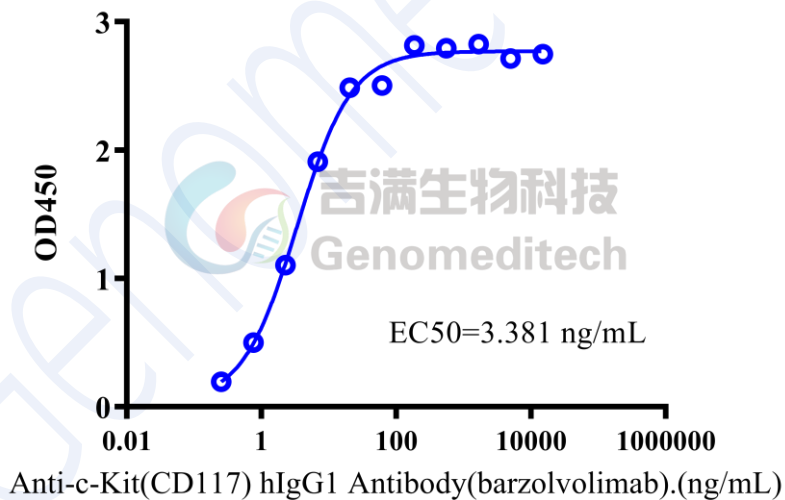


On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

Bioactivity-ELISA

0.1 μg Biotinylated Human c-Kit(CD117) Protein; His-Avi Tag of per well



Biotinylated Human c-Kit(CD117) Protein; His-Avi Tag (Catalog # GM-87118RP) was immobilized at 1 $\mu\text{g}/\text{ml}$ (100 $\mu\text{L}/\text{well}$) on streptavidin precoated. Increasing concentrations of Anti-c-Kit(CD117) hIgG1 Antibody(barzolvolimab) (Catalog # GM-86542AB) were added.